

AMENDMENT TO THE SPECIFICATION

Please replace the paragraph appearing on page 4, lines 9-19 with the amended paragraph:

In one embodiment of the invention, clock uncertainty between a receiving cell and a launching cell of a net is estimated by back-tracing a first path from the receiving cell toward the clock source. Each cell in the first path having a predetermined characteristic (e.g., in a critical path) is marked. A second path from the launching cell is back-traced toward the clock source to a predetermined (e.g., first) marked cell one of the marked cells having the predetermined characteristic (e.g., first marked cell). Clock uncertainty is calculated based on the second path from the predetermined delay associated with the first path between the marked cell and the receiving cell.

(P)  
1/23/06  
A

(P)  
1/23/06

On page 26, lines 4-21, please amend the abstract as follows:

Clock uncertainty between a receiving cell and a launching cell of a net is estimated by back-tracing a first path from the receiving cell toward the clock source and marking each cell having a predetermined characteristic along the first path. A second path from the launching cell toward the clock source is back-traced to a common predetermined one of the marked cells having the predetermined characteristic. Clock uncertainty is calculated based on the portion of the first path from the predetermined marked cell having the predetermined characteristic to the receiving cell. Clock uncertainty is calculated if a slack does not exceed a margin value. In one embodiment, a clock net in the form of a tree is optimized by forcing a first buffer to the center of gravity of a plurality of

(P)  
1/23/06  
B

buffers having nets without timing violations to maximize a common path from the root to the forced buffer and minimize the non-common paths from the forced buffer to the leaves, thereby minimizing clock uncertainty.